Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Implementing Kari's Law and Section 506 of RAY BAUM'S Act	)	PS Docket No. 18-261
	)	
Inquiry Concerning 911 Access, Routing, and Location in Enterprise Communications Systems	)	PS Docket No. 17-239
	)	

COMMENTS OF NCTA – THE INTERNET & TELEVISION ASSOCIATION

NCTA – The Internet & Television Association (NCTA) supports the Commission's goal of ensuring the reliability of the nation's 911 communications system and appreciates this opportunity to comment on rules addressing enhanced 911 capabilities of multi-line telephone systems (MLTS).[1] The Commission is implementing two recently-enacted statutes designed to improve the 911 process, Kari's Law and RAY BAUM'S Act.[2] Under Kari's Law, the Commission is proposing to adopt rules that would require direct dialing capability and centralized notification of calls to 911 made from MLTS, and under section 506 of RAY BAUM'S Act the Commission is considering the feasibility of providing dispatchable location data from MLTS and other technological platforms.[3] Consistent with the statutory language, the Commission should take steps to improve the accuracy of the 911 system in a flexible and

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1 *Implementing Kari's Law and Section 506 of RAY BAUM'S Act, Inquiry Concerning 911 Access, Routing, and Location in Enterprise Communications Systems*, PS Docket Nos. 18-261 and 17-239, Notice of Proposed Rulemaking, FCC 18-132 (Sept. 26, 2018) (*NPRM*).

2 Kari's Law Act of 2017, Pub. L. No. 115-127, 132 Stat. 326 (2018) (codified at 47 U.S.C. § 623); Repack Airwaves Yielding Better Access for Users of Modern Services Act of 2018 (RAY BAUM'S Act), Pub. L. No. 115-141, 132 Stat. 348, 1095, § 506 (2018) (codified at 47 U.S.C. § 615 note).

3 *NPRM*, FCC 18-132, ¶ 2.

effective manner that does not impose unreasonable burdens, particularly on operators of smaller systems.

I. ELIMINATING A PREFIX FOR DIALING 911

After its effective date in 2020, Kari's Law will bar the deployment of MLTS equipment that requires a user to dial a prefix before completing a 911 call.[4] NCTA members already have voluntarily configured most, if not all, of the MLTS equipment they are deploying so that calls to 911 can be completed without dialing a prefix. Indeed, many systems have been configured to complete a 911 call whether the caller dials a prefix first (such as "9") or simply dials 911.

However, some MLTS networks – typically those that use a customer-managed private branch exchange (PBX) – enable a customer to program or alter the calling pattern of a MLTS. In those instances, the Commission should assign the sole responsibility for ensuring compliance with Kari's Law to the customer, who would be "engaged in the business of managing an MLTS," rather than the voice service provider or equipment installer.[5] In other words, where the carrier provides control of the MLTS to the customer, then the responsibility of ensuring that the MLTS system complies with Kari's Law should logically be on the customer. More broadly, NCTA also supports the Commission's proposed presumption "that the MLTS manager bears ultimate responsibility for compliance with [the] proposed rules implementing Kari's Law."[6]

II. NOTIFICATION REQUIREMENT FOR 911 CALLS

In addition to barring the requirement of dialing a prefix to 911, Kari's Law also will generally require MLTS networks, as defined by the statute, to provide a notification to another

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4 *Id.* ¶¶ 13-15.

5 *Id.* ¶ 36.

6 *Id.* ¶ 44.

location contemporaneous with the 911 call.[7] Under both Kari's Law and RAY BAUM'S Act, MLTS is defined as, "a system comprised of common control units, telephone sets, control hardware and software and adjunct systems, including network and premises based systems, such as Centrex and VoIP, as well as PBX, Hybrid, and Key Telephone Systems (as classified by the Commission under part 68 of title 47, Code of Federal Regulations), and includes systems owned or leased by governmental agencies and non-profit entities, as well as for profit businesses."[8] A system would have to meet this technical definition to be subject to the notification requirement.

Kari's Law exempts any MLTS equipment from compliance with the third-party notification mandate if the upgrade would require "an improvement to the hardware or the software of the system."[9] MLTS are provided to commercial customers in a variety of configurations involving both line-based and trunk-based products.[10] The technical capabilities of these two categories of offerings vary considerably. In the case of line-based MLTS, we are not aware of any systems that have a notification capability currently, nor of any manufacturers that are working on upgrades that would enable line-based systems to provide such notifications. Although the proposed notification function is not widely available among MLTS products sold today, we understand that some manufacturers of trunk-based and Centrex-type MLTS equipment are actively working to develop upgrades that would offer the capability to dispatch

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7 *Id.* ¶ 14.

8 *Id.* ¶ 28.

9 *Id.* ¶ 33.

10 Line-based services are typically purchased by small businesses that make few simultaneous calls and operate at a single site. Such businesses do not require advanced routing options and place a premium on systems that are easy to manage operationally. In contrast, trunk-based multi-line services provide customers the flexibility to manage their own equipment (e.g., a PBX). These services accommodate multiple simultaneous calls and have capabilities such as failover, load balancing, scalability, and bursting to accommodate spikes in call volume. These systems also can be used to serve customers who operate in multiple locations. Alternatively, customers may subscribe to cloud-based services that offer features and functions similar to trunk-based services.

such simultaneous emergency messages. Upgrading line-based systems to offer this capability would present a more daunting technological and financial challenge. Accordingly, the Commission should adopt its proposal to clarify that parties are not required to undertake "upgrades to the core systems of an MLTS," "substantial upgrades to the software," or "any software upgrades requiring a significant purchase" in order to comply with the Commission's notification obligation.[11]

In addition, many, perhaps most, of these line-based systems serve very few lines. For example, the vast majority of subscribers to Comcast's Business Voice, Business Voice Mobility, and VoiceEdge Select have four or fewer telephone lines. Including such small systems in the Commission's rules would not serve the public interest. A person working in an office with a four-line system does not require an automated notification to know that a 911 call has been placed by a colleague and the source of the emergency.

Several states that have adopted MLTS location requirements recognized this issue and established minimum thresholds for building or workplace size in square feet or number of floors before the state requirements would apply.[12] These thresholds appropriately account for the fact that many smaller commercial entities do not present the type of challenge in identifying the originating location of a 911 call that the proposed notification requirement is intended to address.

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[11] *NPRM*, FCC 18-132, ¶ 33.

[12] *See, e.g.*, 50 ILCS 750, § 15.6 (Illinois does not require notification for workspaces of 40,000 square feet or less); 65-625 C.M.R. ch. 11 § 4 (Maine does not require multiple location identifiers for businesses of 40,000 square feet or less); 35 Pa. Cons. Stat. § 5311.16(c) (Pennsylvania does not require multiple emergency response locations for workspaces less than 7,000 square feet); Wash. Rev. Code § 80.36.560 (Washington does not require automatic location identification for workspaces of 25,000 square feet or less).

In its description of MLTS, the Commission states that MLTS "can support anywhere from ten to thousands of telephone station/numbers."[13] The Commission therefore appropriately recognized that the definition of MLTS should exclude very small systems, and it should similarly exclude systems with fewer than ten lines from the notification obligation and should consider adopting a business size exemption. In such small locations, the notification requirement is not necessary because first responders will be able to quickly identify the originating location of the 911 call without the need for additional assistance. Accordingly, imposing the notification requirement on such small systems would create unnecessary costs while providing virtually no benefit to the user.

The Commission also should make clear that end user customers should specify the location where the notification is to be sent, rather than imposing that burden on the MLTS provider. As in the case of the Registered Location information provided in the VoIP context, end user customers also should be responsible for updating the location information and informing the MLTS provider of any changes.

III. DISPATCHABLE LOCATION REQUIREMENTS

RAY BAUM'S Act requires the Commission to consider the feasibility of requiring the dissemination of dispatchable location information with 911 calls.[14] Dispatchable location is defined as, "the street address of the calling party, and additional information such as room number, floor number, or similar information necessary to adequately identify the location of the calling party."[15]

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[13] *NPRM*, FCC 18-132, ¶ 6.

[14] *Id.* ¶ 2.

[15] *Id.* ¶ 56.

As in the case of the notification requirement under Kari's Law, when implementing the dispatchable location requirements of RAY BAUM'S Act the Commission should recognize that small businesses with only a few telephone lines are situated differently from larger businesses such as hotels and hospitals. For such a small business, the dispatchable location for any caller often is only the street address, with no need to specify a more granular location and thus no need to provide for prompt updating of the locations of telephones within a business. It is one thing for a service provider to offer a web interface for large enterprise customers to update the registered, dispatchable locations of instruments that they relocate within large buildings or campuses. It would be something else altogether to require service providers to make such an interface available to every two- or four-line customer and to maintain sufficient computing and network capacity to support constant updates of moves within a single room, or to expect such customers to update registered locations when they move instruments within a small space. For such a small customer the street address, augmented in some cases by a suite number, will often be the dispatchable location for the entire business. In such cases, the Commission is correct in stating that "MLTS installers, managers, and operators will be able to identify situations in which street address is sufficient for first responders to quickly and accurately find the calling party."[16]

Although the Commission notes that some vendor solutions may exist to provide dynamic dispatchable location information from MLTS in some situations,[17] the Commission should not mandate their use. These solutions have not been adequately vetted to ensure that they will work effectively in all situations, nor is there any analysis of whether these vendor solutions would be economically viable to deploy. In situations where those methods cannot or

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[16] *Id.* ¶ 58.

[17] *Id.* ¶ 60 n.104.

are not being deployed today, the Commission should find that service providers may rely on the information provided by the MLTS end-user customer, i.e., Registered Location information, to identify the dispatchable location, just as providers do in the fixed VoIP context.

The Commission also should allow providers to rely on information obtained from end users to fulfill any dispatchable location requirement for nomadic VoIP, at least until such time as reliable automatic dispatchable location methods can be developed. In particular, the Commission should adopt its proposal to "allow providers flexibility in implementing dispatchable location solutions, and to fall back to Registered Location options when dispatchable location is not feasible."[18]

The Commission should also recognize that there are fundamental differences between CMRS services and nomadic VoIP services that bear upon the feasibility of dynamically determining a caller's location. A CMRS customer's device is in constant communication with the CMRS carrier's, or its roaming partner's, network, such that the CMRS carrier can determine a caller's approximate location by the device's connection to a particular cell site. The CMRS carrier also can control the devices connected to its network and require, for example, that each device be able to receive GPS signals and communicate its location more precisely to the network. By contrast, a nomadic VoIP subscriber may never connect to a network that is controlled by her VoIP service provider, and her VoIP service provider may have little or no control over the device she uses. A VoIP caller may use software running on a laptop computer with no GPS capability, connected to Wi-Fi with no connection to her VoIP service provider. Given the broad range of connections that may support a VoIP call to 911, none of which may be

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[18] *Id.* ¶ 77.

under the control of the VoIP service provider, and the devices that may be used for the call, many of which have no ability to determine or communicate their own locations, systems that can accurately and dynamically determine the location of a CMRS caller—assuming that such systems actually exist—have little or no utility for dynamically determining the location of a nomadic VoIP caller.

CONCLUSION

In adopting 911 rules implementing the statutory provisions in Kari's Law and RAY BAUM'S Act, the Commission should ensure that the nation's 911 system is improved in a manner that is rational, feasible, and cost-effective.

Respectfully submitted,

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